CLAIMS

What is claimed is:

1. A method for accelerating a user interface on a display of an image capture unit, the image capture unit including a plurality of image files for providing a plurality of images, the image capture unit including controls for allowing an image to be viewed on the display and for allowing navigation between the plurality of images, the method comprising the steps of:

(a) providing a low resolution image, medium resolution image and high resolution image within each image file; and

(b) allowing the medium resolution image to be viewed on the display.

2. The method of claim 1 further includes the steps of

(c) causing the high resolution image within the same image file to be displayed on top of the medium resolution image dependent upon the quality of the medium resolution image; and

(d) allowing for navigation between medium resolution images based upon user interaction.

3. The method of claim 1 in which each of the high resolution images comprises a high resolution JPEG image, each of the medium resolution images comprises a screennail image, and each of the low resolution images comprises a thumbnail image.

4. The method of claim 1 in which causing the high resolution image to be displayed is dependent upon the resolution of the medium resolution image and the resolution of the display.

5. The method of claim 1 in which step (b) further comprises the steps of:

(b1) fetching the screennail image from the image file;

(b2) decompressing the screennail image; and

(b3) displaying the decompressed screennail image.

6. The method of claim 1 in which the causing step (c) further comprises the steps of:

(c1) fetching the JPEG image from the image file;

(c2) decompressing the JPEG image; and

(c3) replacing the decompressed screennail image with the decompressed JPEG image.

7. A method for accelerating a user interface on a display of an image capture unit, the image capture unit including a plurality of image files for providing a plurality of images, each image file including a high resolution image therein, the image capture unit including controls for allowing an image to be viewed on the display and for allowing navigation between the plurality of images, the method comprising the steps of:

(a) providing a lower resolution image within each image file, the lower resolution image being associated with the high resolution image within a particular image file;

(b) allowing the lower resolution image to be viewed on the display;

(c) causing the high resolution image related to lower resolution image to be displayed on top of the lower resolution image dependent upon the quality of the lower resolution image; and

(d) allowing for navigation between lower resolution images based upon user interaction.

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8. The method of claim 1 in which each of the high resolution images comprises a JPEG image and each of the lower resolution images comprises a screennail image.

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9. The method of claim 8 in which causing the high resolution image to be displayed is dependent upon the resolution of the lower resolution image and the resolution of the display.

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10. The method of claim 7 in which the allowing step (b) further comprises the steps of:

(b1) fetching the screennail image from the image file;

(b2) decompressing the screennail image; and

(b3) displaying the decompressed screennail image.

10 11. The method of claim 6 in which the causing step (c) further comprises the steps of:

(c1) fetching the JPEG image from the image file;

(c2) decompressing the JPEG image; and

(c3) replacing the decompressed screennail image with the decompressed JPEG image.

11 12. A method for accelerating a user interface on a display of an image capture unit, the image capture unit including a plurality of image files for providing a plurality of images, each image file including a high resolution image therein, the image capture unit including controls for allowing an image to be viewed on the display and for allowing navigation between the plurality of images, the method comprising the steps of:

(a) providing a lower resolution image within each image file, the lower resolution image being associated with the high resolution image within a particular image file;

(b) allowing a lower resolution image to be viewed on the display;

(c) determining if a next lower resolution image is to be viewed on the display;

(d) providing a next lower resolution image on the display; and

(e) causing the high resolution image related to low resolution image to be displayed on top of the low resolution image dependent upon the quality of the lower resolution image if the user has not scrolled to the next image.

12. The method of claim 11 in which each of the high resolution images comprises a JPEG image and each of the lower resolution images comprises a screennail image.

13. The method of claim 12 in which causing the high resolution image to be displayed is dependent upon the resolution of the lower resolution image and the resolution of the display.

14. The method of claim 11 in which allowing step (b) further comprises the steps of:

(b1) fetching the screennail image from the image file;

(b2) decompressing the screennail image; and

(b3) displaying the decompressed screennail image.

15. The method of claim 11 in which causing step (e) further comprises the steps of:

(e1) fetching the JPEG image from the image file;

(e2) decompressing the JPEG image; and

(e3) replacing the decompressed screennail image with the decompressed JPEG image.

17. A system for accelerating a user interface on a display of an image capture unit, the image capture unit including a plurality of image files for providing

a plurality of images, the image capture unit including controls for allowing an image to be viewed on the display and for allowing navigation between the plurality of images, the method comprising:

means for providing a low resolution image, medium resolution image and high resolution image within each image file; and

means for allowing the medium resolution image to be viewed on the display.

18. The system of claim 16 further includes the steps of

means for causing the high resolution image within the same image file to be displayed on top of the medium resolution image dependent upon the quality of the medium resolution image; and

means for allowing for navigation between medium resolution images based upon user interaction.

19. The system of claim 17 in which the each of the high resolution images comprises a high resolution JPEG image, each of the medium resolution images comprises a screennail image, and each of the low resolution images comprises a thumbnail image.

20. The system of claim 18 in which the causing the high resolution image to be displayed is dependent upon the resolution of the medium resolution image and the resolution of the display.

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21. The system of claim 17 in which medium resolution image allowing means further comprises:

means for fetching the screennail image from the image file;

means for decompressing the screennail image; and

means for displaying the decompressed screennail image.

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~~22~~. The system of claim ~~18~~ in which causing means further comprises:

means for fetching the JPEG image from the image file;

means for decompressing the JPEG image; and

means for replacing the decompressed screennail image with the decompressed JPEG image.

21

~~23~~. A system for accelerating a user interface on a display of an image capture unit, the image capture unit including a plurality of image files for providing a plurality of images, each image file including a high resolution image therein, the image capture unit including controls for allowing an image to be viewed on the display and for allowing navigation between the plurality of images, the method comprising:

means for providing a lower resolution image within each image file, the lower resolution image being associated with the high resolution image within a particular image file;

means for allowing the lower resolution image to be viewed on the display;

means for causing the high resolution image related to lower resolution image

to be displayed on top of the lower resolution image dependent upon the quality of the lower resolution image; and

means for allowing for navigation between lower resolution images based upon user interaction.

24. The system of claim 21 in which each of the high resolution images comprises a JPEG image and each of the lower resolution images comprises a screennail image.

25. The system of claim 22 in which causing the high resolution image to be displayed is dependent upon the resolution of the lower resolution image and the resolution of the display.

26. The system of claim 21 in which the allowing means further comprises:

means for fetching the screennail image from the image file;

means for decompressing the screennail image; and

means for displaying the decompressed screennail image.

27. The system of claim 21 in which the causing means further comprises:

means for fetching the JPEG image from the image file;

means for decompressing the JPEG image; and

means for replacing the decompressed screennail image with the decompressed JPEG image.

28. A system for accelerating a user interface on a display of an image capture unit, the image capture unit including a plurality of image files for providing a plurality of images, each image file including a high resolution image therein, the image capture unit including controls for allowing an image to be viewed on the display and for allowing navigation between the plurality of images, the system comprising:

means for providing a lower resolution image within each image file, the lower resolution image being associated with the high resolution image within a particular image file;

means for allowing a lower resolution image to be viewed on the display;

means for determining if a next lower resolution image is to be viewed on the display;

means for providing a next lower resolution image on the display; and

means for causing the high resolution image related to low resolution image to be displayed on top of the lower resolution image dependent upon the quality of the lower resolution image if the user has not scrolled to the next image.

29. The system of claim 28 in which each of the high resolution images comprises a JPEG image and each of the lower resolution images comprises a screennail image.

30. The system of claim 29 in which causing the high resolution image to

be displayed is dependent upon the resolution of the lower resolution image and the resolution of the display.

31. The system of claim 28 in which allowing means further comprises:

means for fetching the screennail image from the image file;

means for decompressing the screennail image; and

means for displaying the decompressed screennail image.

32. The system of claim 28 in which causing means further comprises:

means for fetching the JPEG image from the image file;

means for decompressing the JPEG image; and

means for replacing the decompressed screennail image with the decompressed JPEG image.

33. A method for accelerating a user interface on a display of an image capture unit, the image capture unit including a plurality of image files for providing a plurality of images, the image capture unit including controls for allowing an image to be viewed on the display and for allowing navigation between the plurality of images, the image capture unit operating in a plurality of modes, the method comprising the steps of:

(a) providing a low resolution image, medium resolution image and high resolution image within each image file;

(b) allowing the medium resolution image to be viewed on the display in a

first mode;

(c) providing a plurality of low resolution images on the display in a second mode; and

(d) selecting one of the plurality of low resolution images to be displayed as a resized low resolution image on the display, the resized low resolution image being a larger version of the selected one of the plurality of low resolution images.

34. The method of claim 33 further includes the steps of

(b1) causing the high resolution image within the same image file to be displayed on top of the medium resolution image dependent upon the quality of the medium resolution image; and

(b2) allowing for navigation between medium resolution images based upon user interaction.

35. The method of claim 33 in which each of the high resolution images comprises a high resolution JPEG image, each of the medium resolution images comprises a screennail image, and each of the low resolution images comprises a thumbnail image.

36. The method of claim 34 in which causing the high resolution image to be displayed is dependent upon the resolution of the medium resolution image and the resolution of the display.

37. The method of claim 33 in which step (b) further comprises the steps of:

(b1) fetching the screennail image from the image file;

(b2) decompressing the screennail image; and

(b3) displaying the decompressed screennail image.

38. The method of claim 34 in which causing step (b1) further comprises the steps of:

(b1i) fetching the JPEG image from the image file;

(b1ii) decompressing the JPEG image; and

(b1iii) replacing the decompressed screennail image with the decompressed JPEG image.

39. The method of claim 38 wherein the low resolution images comprises a plurality of thumbnail images.

40. The method of claim 35 wherein the plurality of thumbnail images and the resized images are displayed using the thumbnail image data.

41. The method of claim 40 wherein the resized image is generated by multiplying the one of the plurality of thumbnail image data by a multiplication factor.

42. The method of claim 35 in which the plurality of thumbnail images are cropped.

43. The method of claim 42 wherein the resized image is generated by expanding the one of the plurality of cropped thumbnail images.

44. The method of claim 40 in which the plurality of thumbnail images are in landscape format.

45. The method of claim 40 in which the plurality of thumbnail images are in true orientation and aspect ratio.

46. The method of claim 40 wherein an enhanced image file comprises a compressed image data, a thumbnail image data associated with the compressed image and image tags associated with the compressed image data and the thumbnail image.

47. The method of claim 45 wherein the image capture unit includes a working memory and input buffers.

48. The method of claim 46 wherein the thumbnail images are cached into the working memory.

49. The method of claim 47 wherein the input buffers are partitioned into a draw buffer and a display buffer wherein the draw buffer contains information relating to a selected image and provides that information to the display buffer.